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In the claims:

1. (Original) A centrifuge comprising means for removably receiving a unitary container having a plurality of chambers for receiving substances to be centrifuged, means for rotating said container to subject said substances to centrifugation, and means for locking said container in a first predetermined position to allow a supernatant in a first of said chambers to transfer into a second of said chambers and for locking said container in a second position to transfer a supernatant in said second chamber to another of said chambers.
2. (Original) Apparatus according to claim 1 wherein said means for locking, when activated, locks said container such that a supernatant in one of said chambers transfers into another of said chambers by gravity draining.
3. (Original) Apparatus according to claim 1 wherein said means for locking, when activated, locks said container such that a supernatant in one of said chambers transfers into another of said chambers by centrifugal transferring.
4. (Original) Apparatus according to claim 1 wherein said means for locking, when activated to a first position, locks said container such that a supernatant in said first chamber drains into said second chamber by gravity draining and,

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when activated to a second position, locks said container such that a supernatant in said second chamber transfers into said first chamber by centrifugal transferring.

5. (Original) Apparatus according to claim 1 wherein said locking means comprises a movable plate and means for controlling the position of said plate.

6. (Original) Apparatus according to claim 5 wherein means for controlling is electrical.

7. (Original) Apparatus according to claim 6 wherein said means for controlling is magnetic.

8. (Original) Apparatus according to claim 1 further comprising means for controlling said means for locking and said means for rotating to provide automatic multiple decanting by activating said means for rotating for a predetermined period of time, activating said means for locking to allow a supernatant in said first chamber to transfer into said second chamber, activating said means for rotating a second time, and activating said means for locking a second time to allow a supernatant in said second chamber to transfer into said first chamber.

9. (Original) Apparatus according to claim 8 wherein said means for locking locks said container such that a supernatant in said first chamber transfers into said second

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chamber by gravity draining and locks said container such that a supernatant in said second chamber transfers into said first chamber by centrifugal transferring.

10. (Original) Apparatus according to claim 1 further comprising means for controlling the temperature of the contents of said second chamber.

11. (Original) Apparatus according to claim 10 wherein said means for controlling the temperature is capable of freezing said contents for cryoprecipitation.

12. (Original) Apparatus for separation of a precipitate from a liquid comprising a unitary container having first and second adjacent chambers, wherein said first chamber is located with respect to said second chamber such that a first supernatant in said first chamber drains by gravity into said second chamber when said first and second chambers are held in a first orientation and a second supernatant in said second chamber transfers from said second chamber into said first chamber by centrifugal transferring when said first and second chambers are held in a second orientation and subjected to centrifugation.

13. (Original) Apparatus according to claim 12 wherein said first and second chambers are joined by a wall that forms a fluid flow path between said first and second chambers.

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14. (Previously Presented) Apparatus according to claim 13 further comprising divider means for dividing said first chamber into two [pads] parts, said divider means being located near the expected location of the interface between said precipitate and said liquid.

15. (Original) Apparatus according to claim 14 wherein said divider means includes a periphery having at least one groove therein for allowing fluid communication between said two parts.

16. (Original) Apparatus according to claim 12 further comprising a covering on said first and second chambers for preventing spillage of the contents of said chambers while allowing a syringe to inject fluids into or remove fluids from said chambers.

17. (Original) Apparatus according to claim 16 wherein said covering includes access port means for each of said chambers for allowing a fluid to be introduced into a chamber and means for sealing said access port means until opened to allow said fluid to pass.

18. (Original) Apparatus according to claim 17 wherein at least one of said chambers includes a hollow tube aligned with a said access port for conducting said fluid into said at least one of said chambers.

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19. (Original) Apparatus according to claim 18 further comprising air vent means for allowing air in said container to exit from said container.

20. (Original) Apparatus according to claim 12 in combination with a centrifuge for subjecting said liquid to centrifugation, locking said chambers in said first orientation to allow said first supernatant to drain into said second chamber, and locking said chambers in said second orientation while rotating said chambers to provide said centrifugal transferring.

21. (Original) A centrifuge comprising a first chamber for receiving a fluid substance and a second chamber for receiving a fluid substance, means for rotating said first and second chambers to subject said substances to centrifugation, and means for locking said chambers in first predetermined positions and for locking said chambers in second predetermined positions, means for transferring a supernatant in said first chamber into said second chamber by gravity when said chambers are in said first predetermined positions and for transferring a supernatant in said second chamber to said first chamber by centrifugal transfer when said chambers are in said second predetermined positions.

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22. (Previously presented) A system for treating physiological products, comprising:

a centrifuge;

a container having at least a first chamber and an adjacent second chamber, wherein each of the first and second chambers has a top portion, a bottom portion and a set of walls, wherein the top portions of the first chamber and second chamber are adjacent each other and connected by a bridge that transfers fluid therebetween when said container is in a predetermined orientation; and

a holder assembly attached to the centrifuge and effective to removably receive the container and orient the container in said predetermined orientation.

23. (Previously presented) The system of claim 22, wherein the chambers include removable lid portions, thereby forming a closed container.

24. (Previously presented) The system of claim 23 wherein at least one of the chambers includes an access port for transference of a liquid.

25. (Currently amended) A container comprising:  
a first sterile chamber having a first top portion, a first bottom portion and a first set of walls;

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a second sterile chamber adjacent said first sterile chamber and having a second top portion adjacent said first top portion, a second bottom portion and a second set of walls;

a bridge connecting said first top portion of the first chamber and said second top portion of the second chamber, such that a liquid can be transferred from the first chamber to the second chamber while the container is positioned at a predetermined angle, and

means for sterile transfer of a liquid to or from at least one of said chambers independently of the other of said chambers and located near the top of at least one of said chambers.

26. (Previously presented) The container of claim 25, wherein the chambers include a removable lid portion.

27. (Cancelled)

28. (Currently amended) A system for treating physiological products and maintaining sterility of said products during said treating comprising:

a container having a plurality of closed, sterile fluid-receiving chambers, a bridge forming a fluid path allowing fluid communication between a first of said chambers and a second of said chambers when said container is in a

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predetermined orientation, and at least one access port allowing sterile access to at least one of said chambers, and a centrifuge having a holder removably receiving said container and allowing said container to assume a first orientation wherein a physiological product in one of said chambers is subjected to centrifugation and said predetermined orientation wherein fluid in said first of said chambers flows along said fluid path to said second of said chambers and said centrifuge comprises a locking element that selectively holds said container in said predetermined orientation.

29. (Previously presented) A system according to claim 28 wherein said holder comprises a frame pivotally mounted to a rotor of said centrifuge.

30. (Currently amended) A system according to claim 28 wherein said locking element comprises a movable locking plate that is movable between free and locking positions, wherein said plate allows said container to assume said first orientation when in said free position and holds said container in said predetermined position when in said locking position.



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31. (Previously presented) A system according to claim 30 further comprising an electromagnet for moving said locking plate to one of said locking and free positions.

32. (Currently amended) A system according to claim 28 wherein said holder comprises a frame pivotally mounted to a rotor of said centrifuge, and said locking element comprises a movable locking plate that is movable between free and locking positions, wherein said movable locking plate engages said frame to allow said container to assume said first orientation when in said free position and to hold said container in said predetermined position when in said locking position.

33. (Currently amended) A container comprising a base forming a plurality of sterile chambers, each of said chambers having a bottom and a top, a bridge connecting top portions of at least two of said chambers and arranged to provide a sterile fluid channel from a first of said at least two sterile chambers to a second of said at least two sterile chambers when said container is in a predetermined orientation, a lid closing said top of each of said plurality of chambers, and an access port near the top of at least one of said chambers forming an opening covered by an element that allows sterile transfer of a liquid through said opening to

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or from said at least one of said chambers independently of the other of said chambers.

34. (Previously presented) A container according to claim 33 wherein said plurality of sterile chambers and said bridge comprise a molded base part.

35. (Previously presented) A container according to claim 34 wherein said container is substantially rigid.

36. (Previously presented) A container according to claim 33 further comprising a separation disk in one of said chambers.

37. (Previously presented) A container according to claim 33 wherein said plurality of chambers comprise first and second adjacent chambers having adjacent sidewalls and said bridge is formed at the tops of said adjacent sidewalls.

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MARKED UP CLAIM AMENDMENTS

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25. (Currently amended) A container comprising:  
[at least] a first sterile chamber having a first top portion,  
a first bottom portion and a first set of walls;  
a second sterile chamber adjacent said first sterile  
chamber and having a second top portion adjacent said first top  
portion, a second bottom portion and a second set of walls;  
a bridge connecting said first top portion of the first  
chamber and said second top portion of the second chamber,  
such that a liquid can be transferred from the first chamber to  
the second chamber while the container is positioned at a  
predetermined angle, and  
means for sterile transfer of a liquid to or from at  
least one of said chambers independently of the other of  
said chambers and located near the top of at least one of  
said chambers [maintaining sterility of said first and second  
chambers during addition or removal of liquids to said  
chambers].

28. (Currently amended) A system for treating physiological  
products and maintaining sterility of said products during said  
treating comprising:  
a container having a plurality of closed, sterile fluid-  
receiving chambers, a bridge forming a fluid path allowing fluid  
communication between a first of said chambers and a second  
of said chambers when said container is in a predetermined  
orientation, and at least one access port allowing sterile

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access to at least one of said chambers [to maintain sterility],  
and

a centrifuge having a holder removably receiving said  
container and allowing said container to assume a first  
orientation wherein a physiological product in one of said  
chambers is subjected to centrifugation and said predetermined  
orientation wherein fluid in said first of said chambers flows  
along said fluid path to said second of said chambers and said  
centrifuge comprises a locking element that selectively  
holds said container in said predetermined orientation.

30. (Currently amended) A system according to claim 28  
[further comprising] wherein said locking element comprises  
a movable locking plate that is movable between free and  
locking positions, wherein said plate allows said container to  
assume said first orientation when in said free position and  
holds said container in said predetermined position when in  
said locking position.

32. (Currently amended) A system according to claim 28  
wherein said holder comprises a frame pivotally mounted to a  
rotor of said centrifuge, and [further comprising] said locking  
element comprises a movable locking plate that is movable  
between free and locking positions, wherein said movable  
locking plate engages said frame to allow said container to  
assume said first orientation when in said free position and to  
hold said container in said predetermined position when in said  
locking position.

33. (Currently amended) A container comprising a base  
forming a plurality of sterile chambers, each of said chambers

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having a bottom and a top, a bridge connecting top portions of at least two of said chambers and arranged to provide a sterile fluid channel from a first of said at least two sterile chambers to a second of said at least two sterile chambers when said container is in a predetermined orientation, a lid closing said top of each of said plurality of chambers, and an access port near the top of at least one of said chambers forming an opening covered by an element that allows sterile transfer of a liquid through said opening to or from said at least one of said chambers independently of the other of said chambers [access ports that provide access to the chambers while maintaining sterility].